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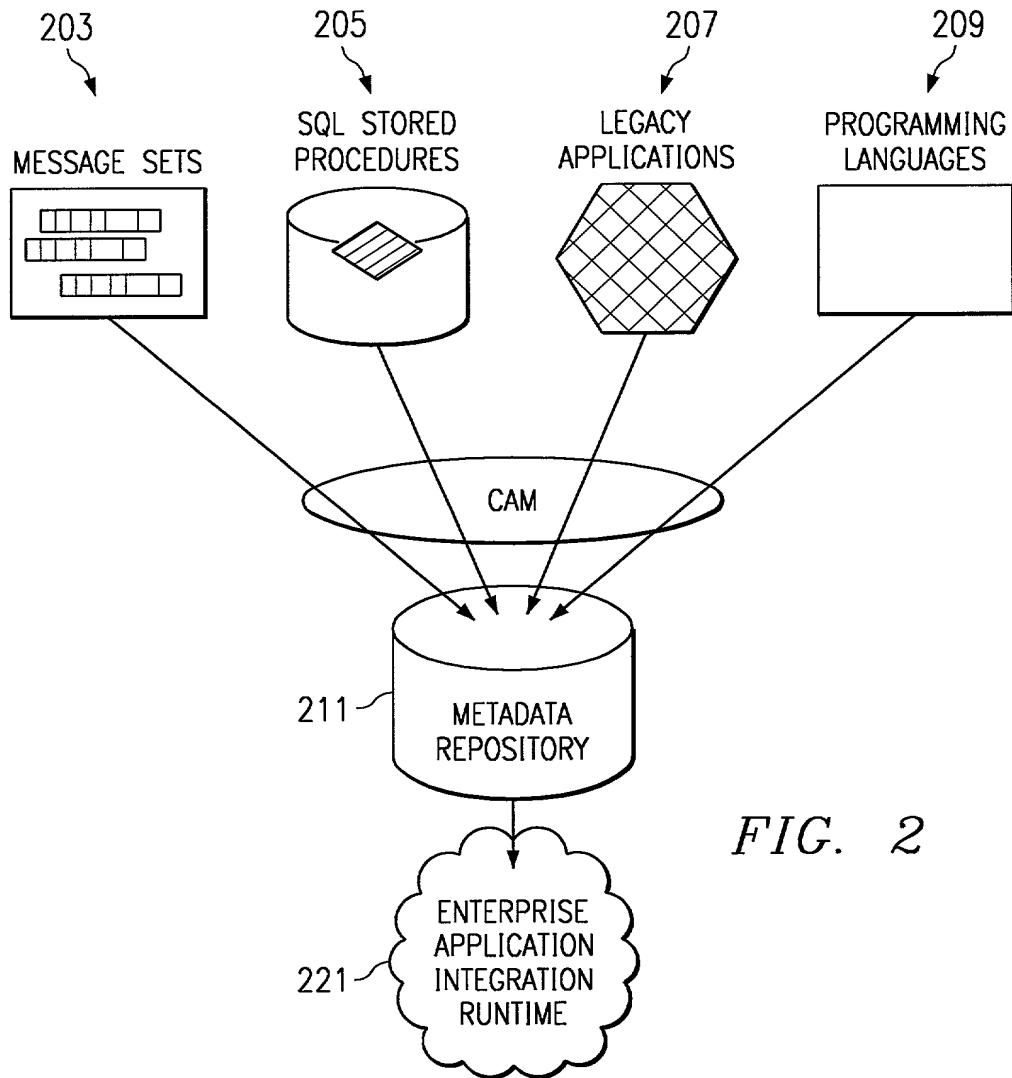


FIG. 2

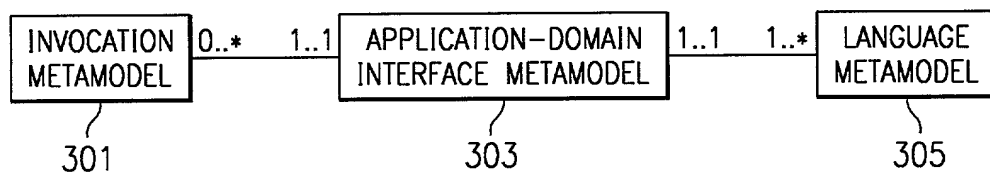
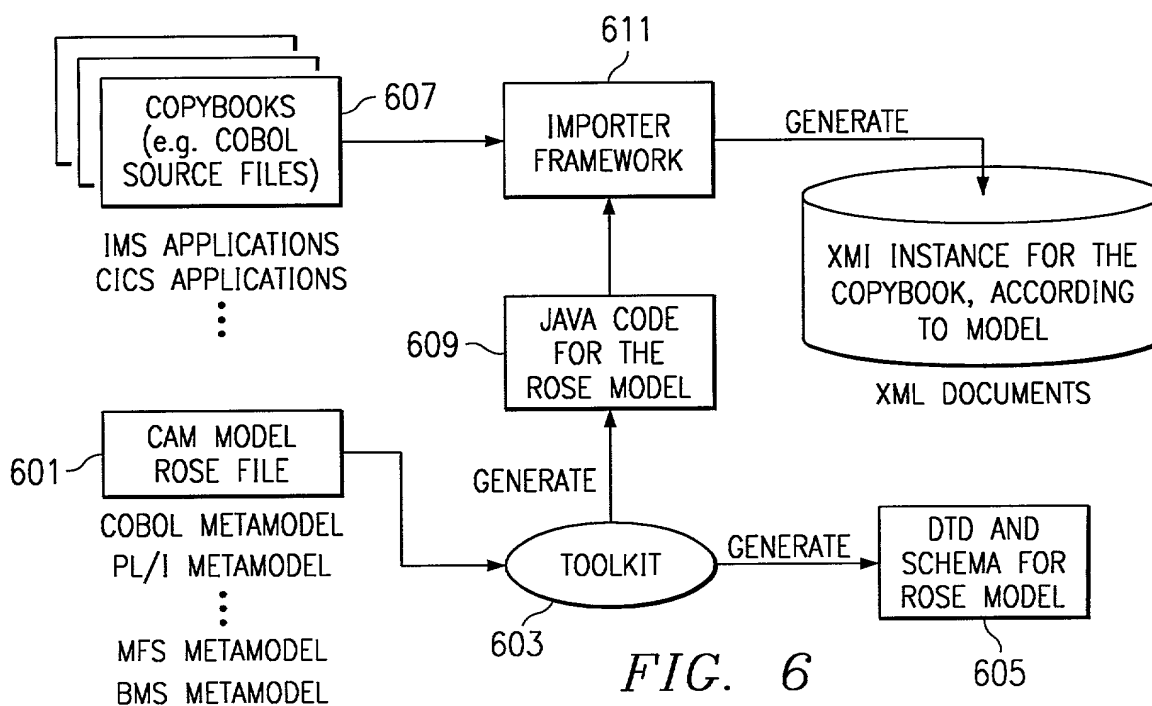
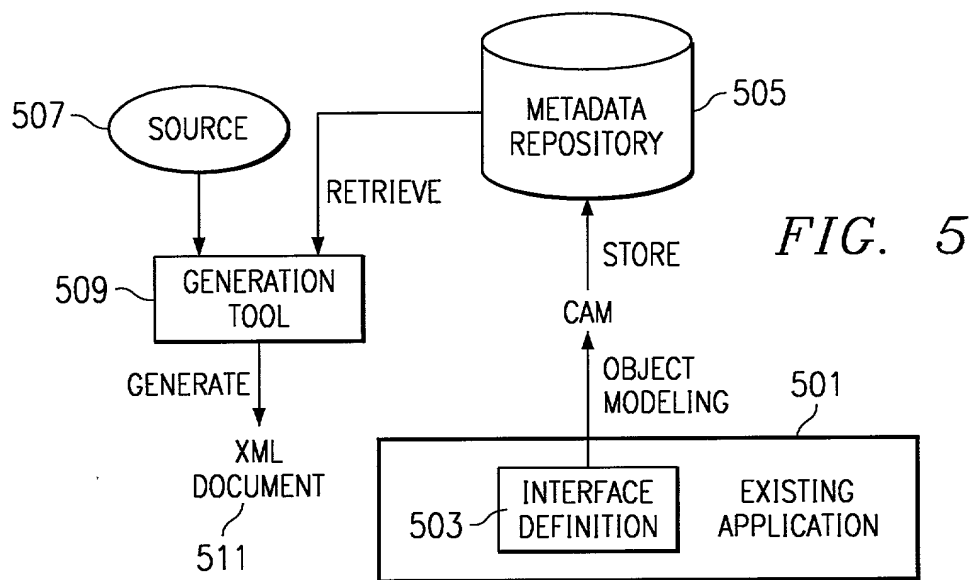
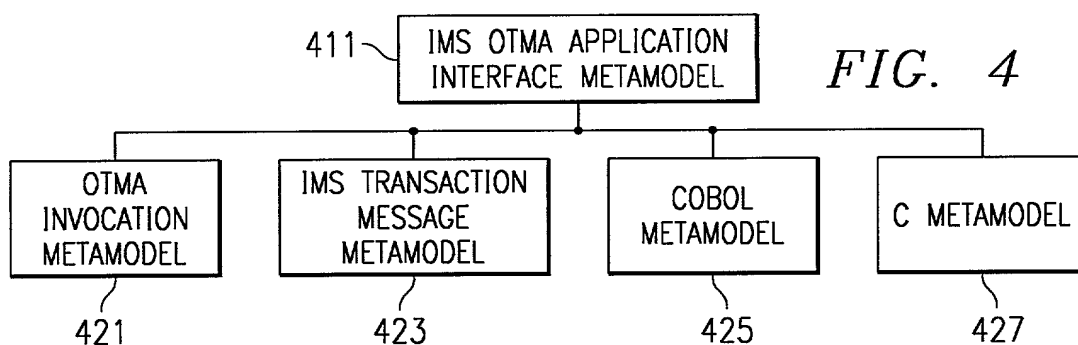


FIG. 3

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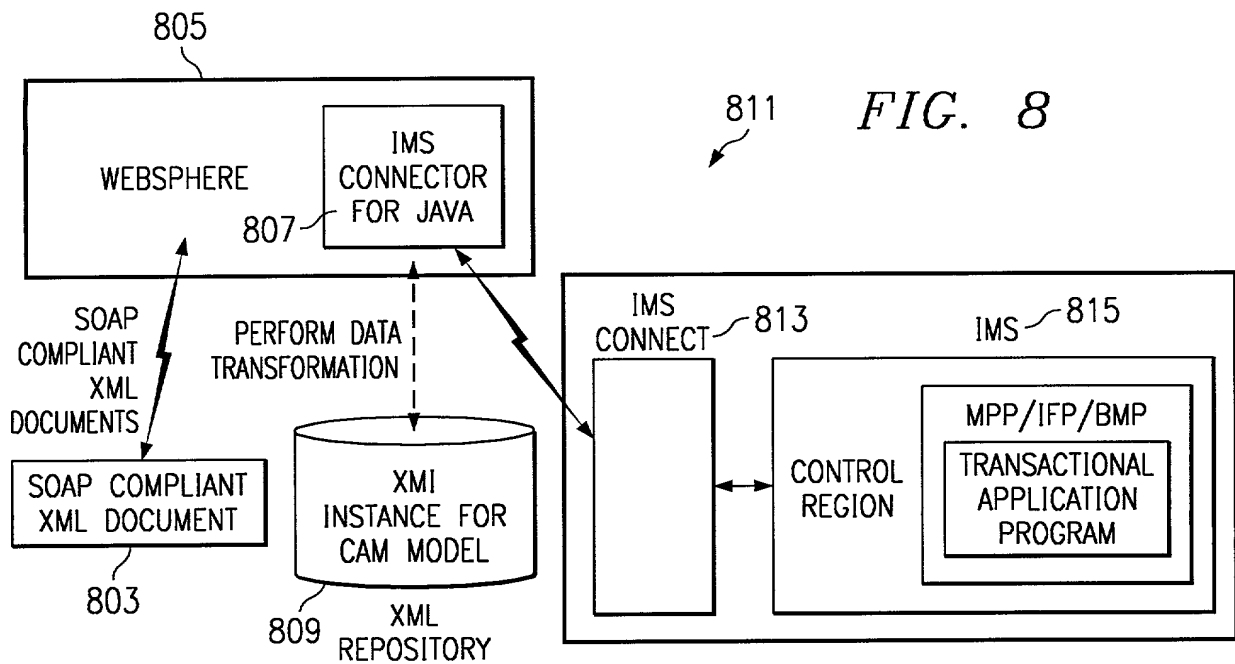
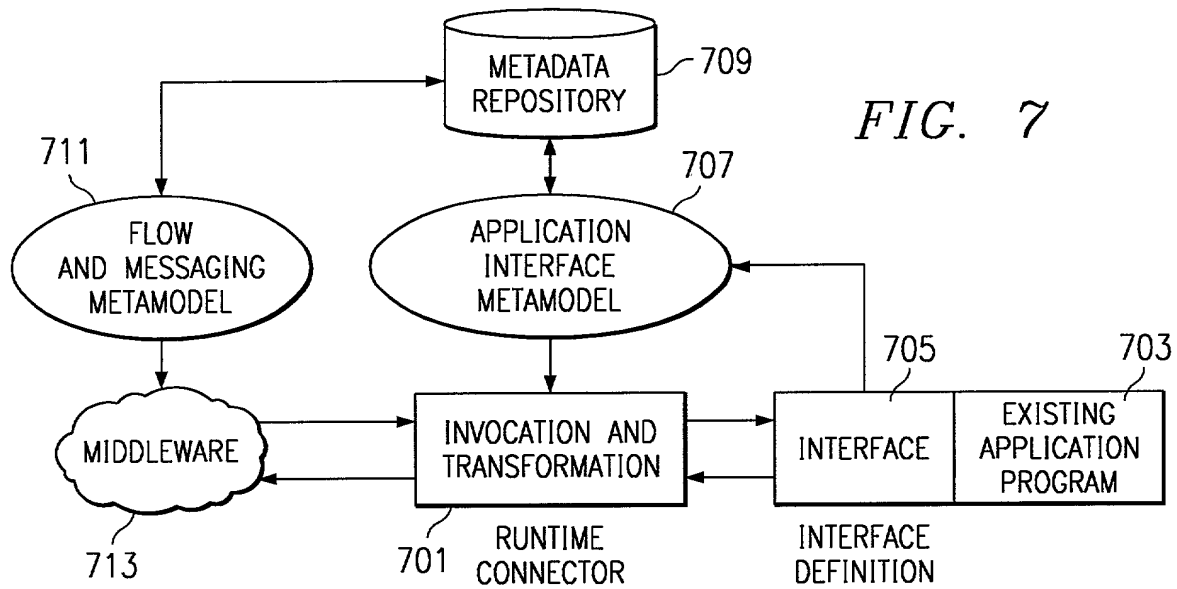


FIG. 9

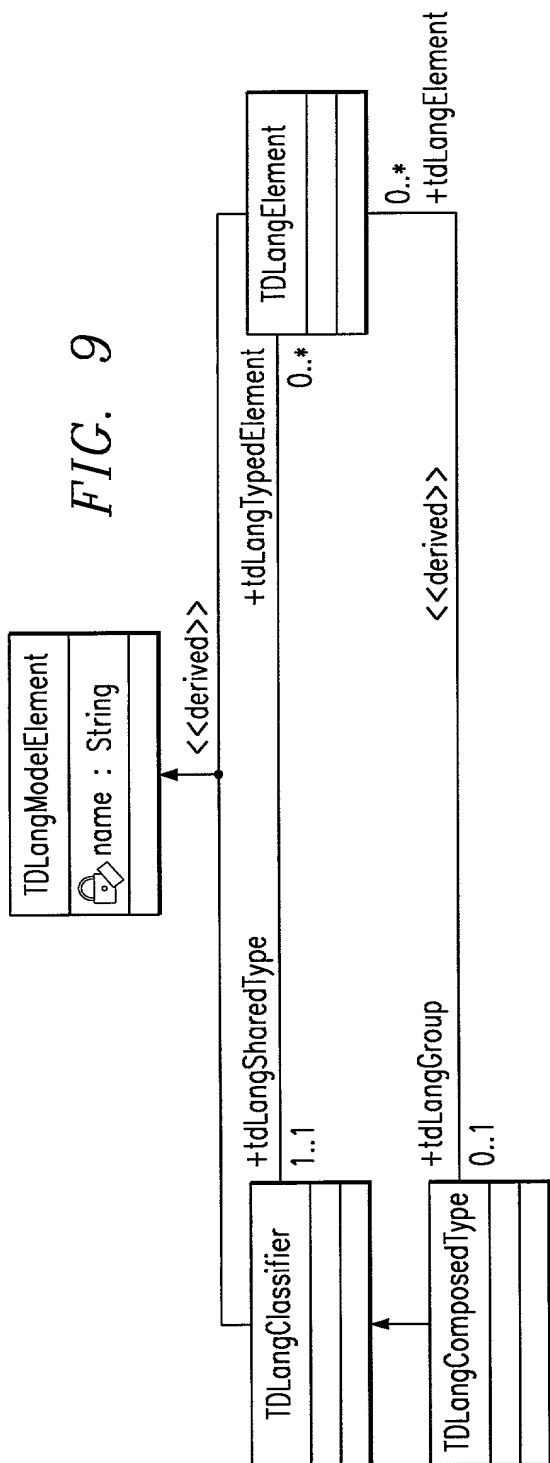
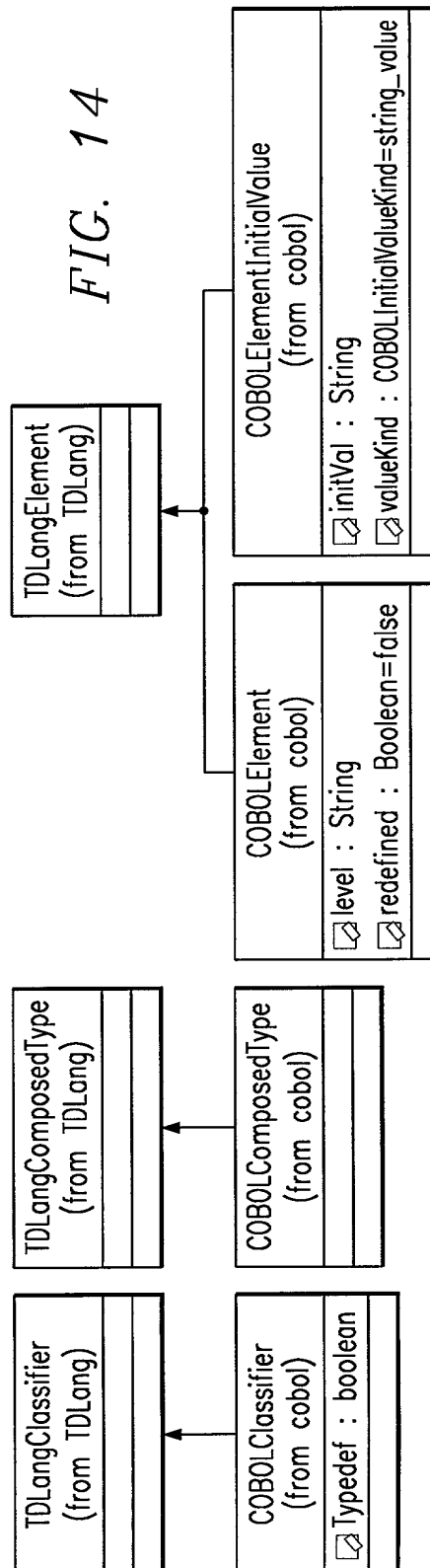
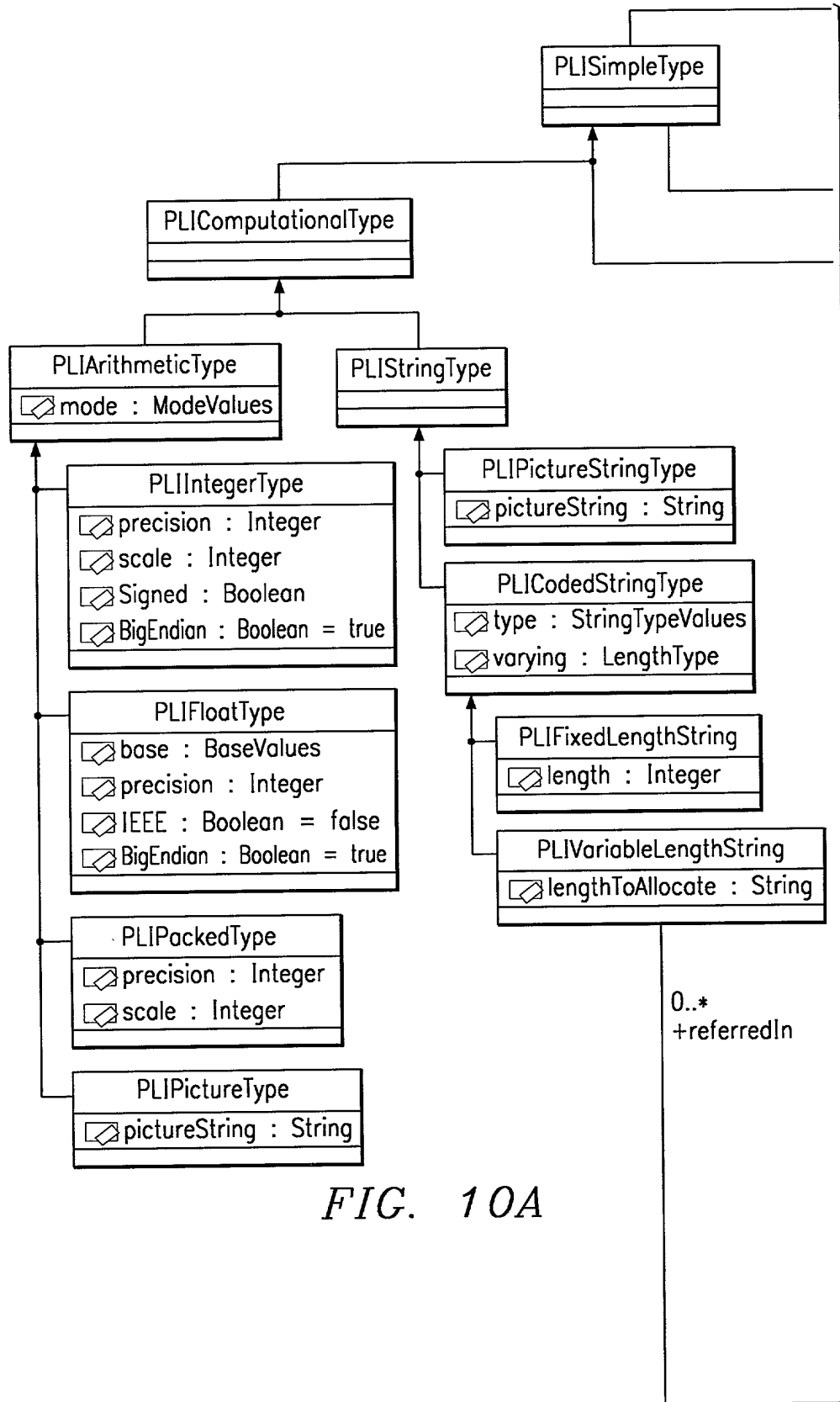


FIG. 14



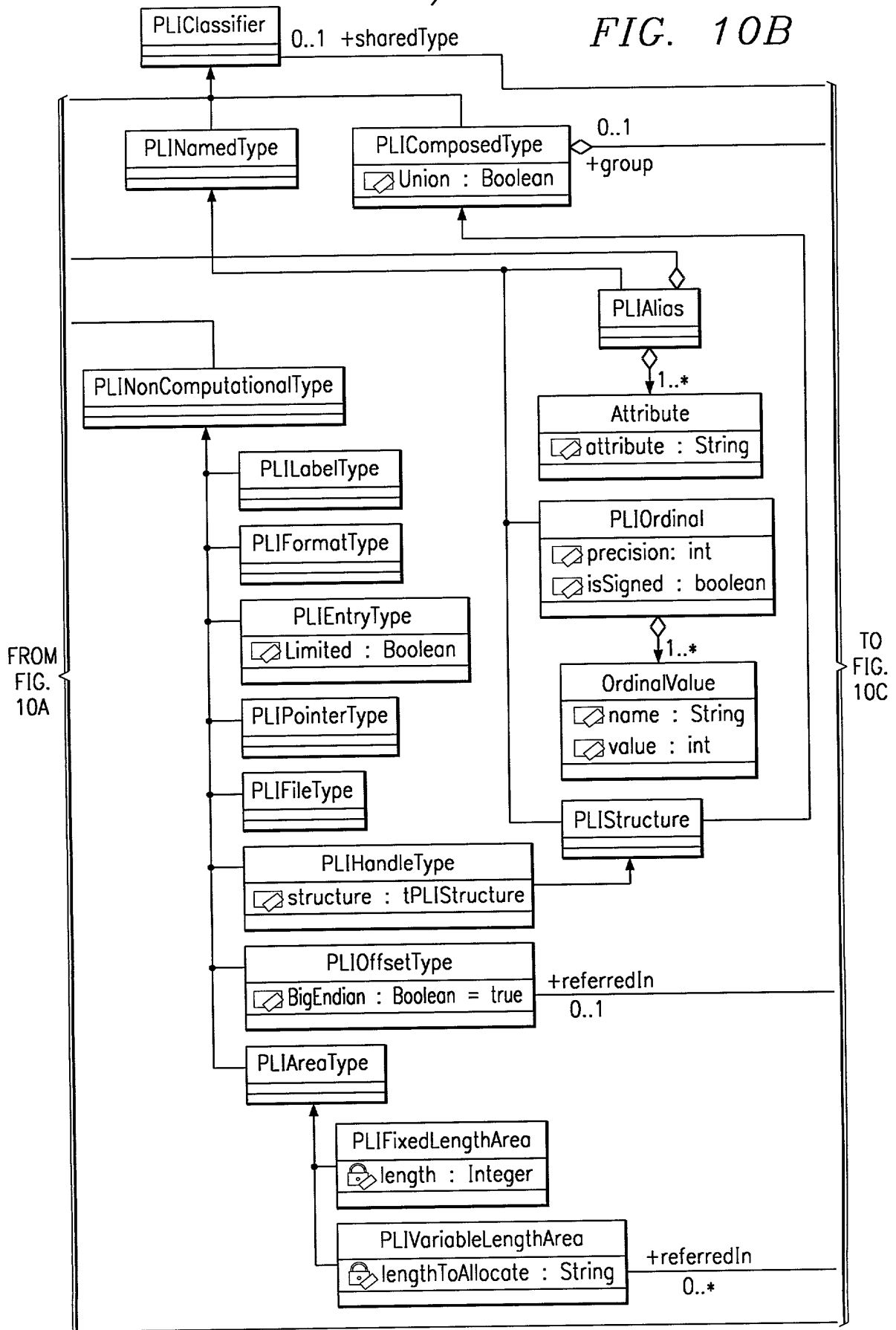


TO  
FIG.  
10B

FIG. 10A

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FIG. 10B



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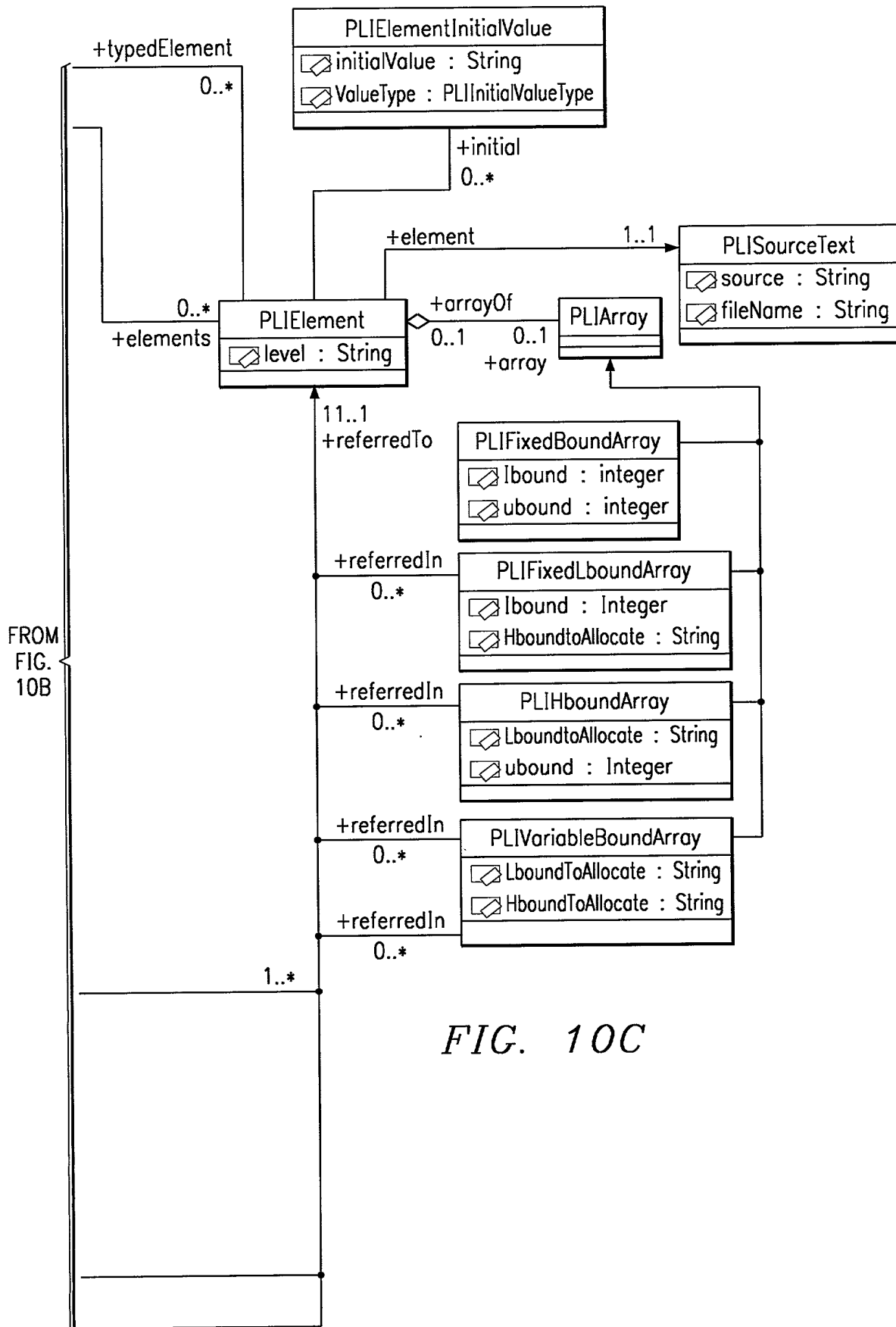


FIG. 10C



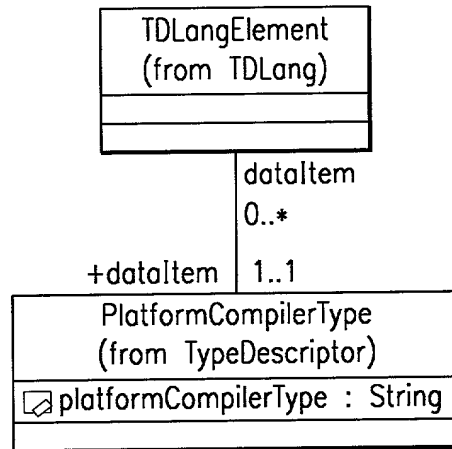
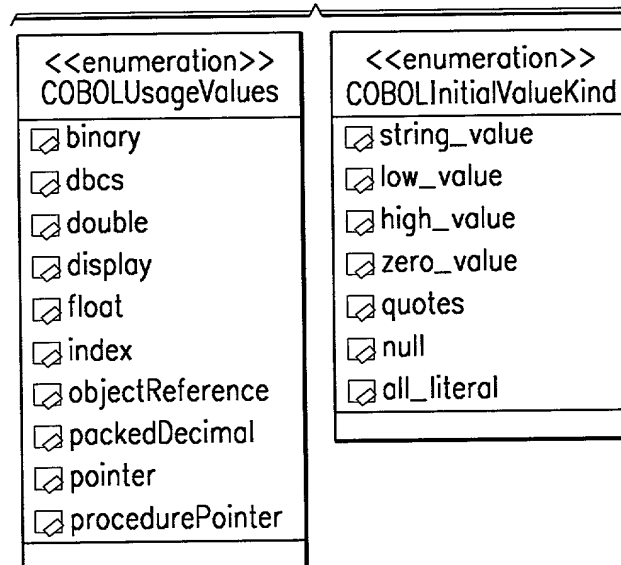


FIG. 11

FIG. 15



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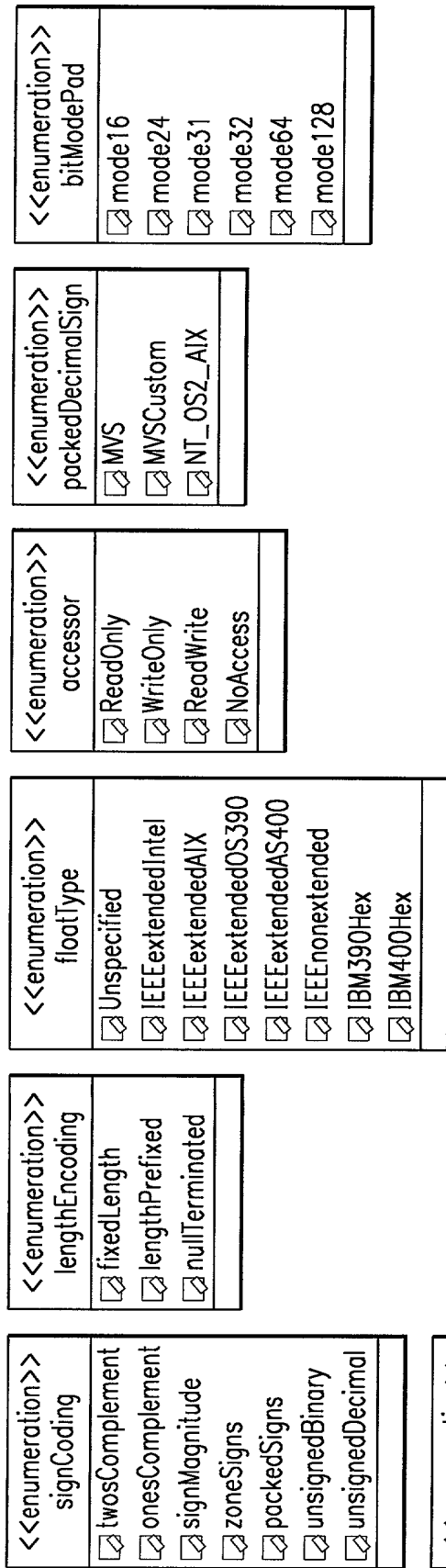


FIG. 12

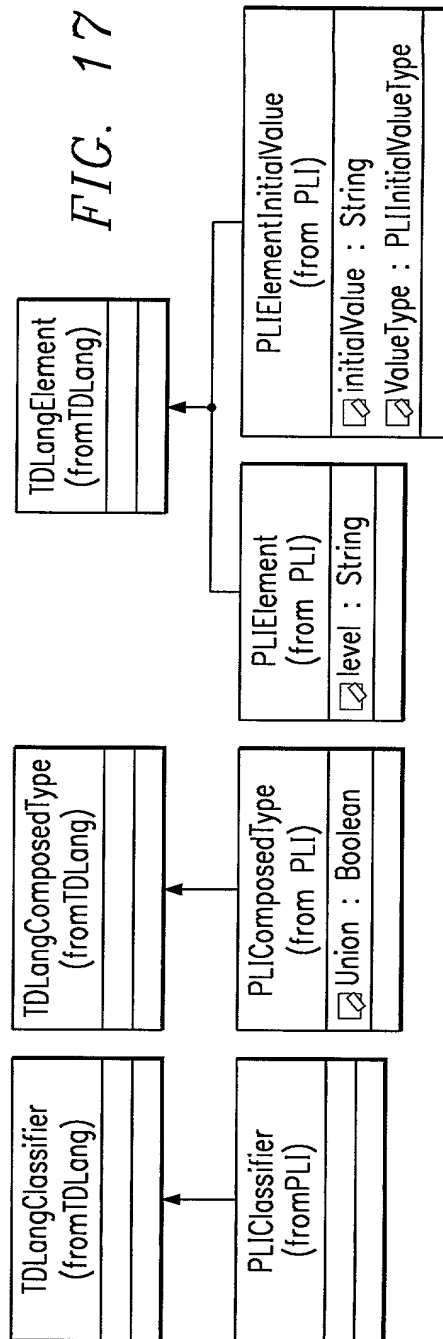


FIG. 17

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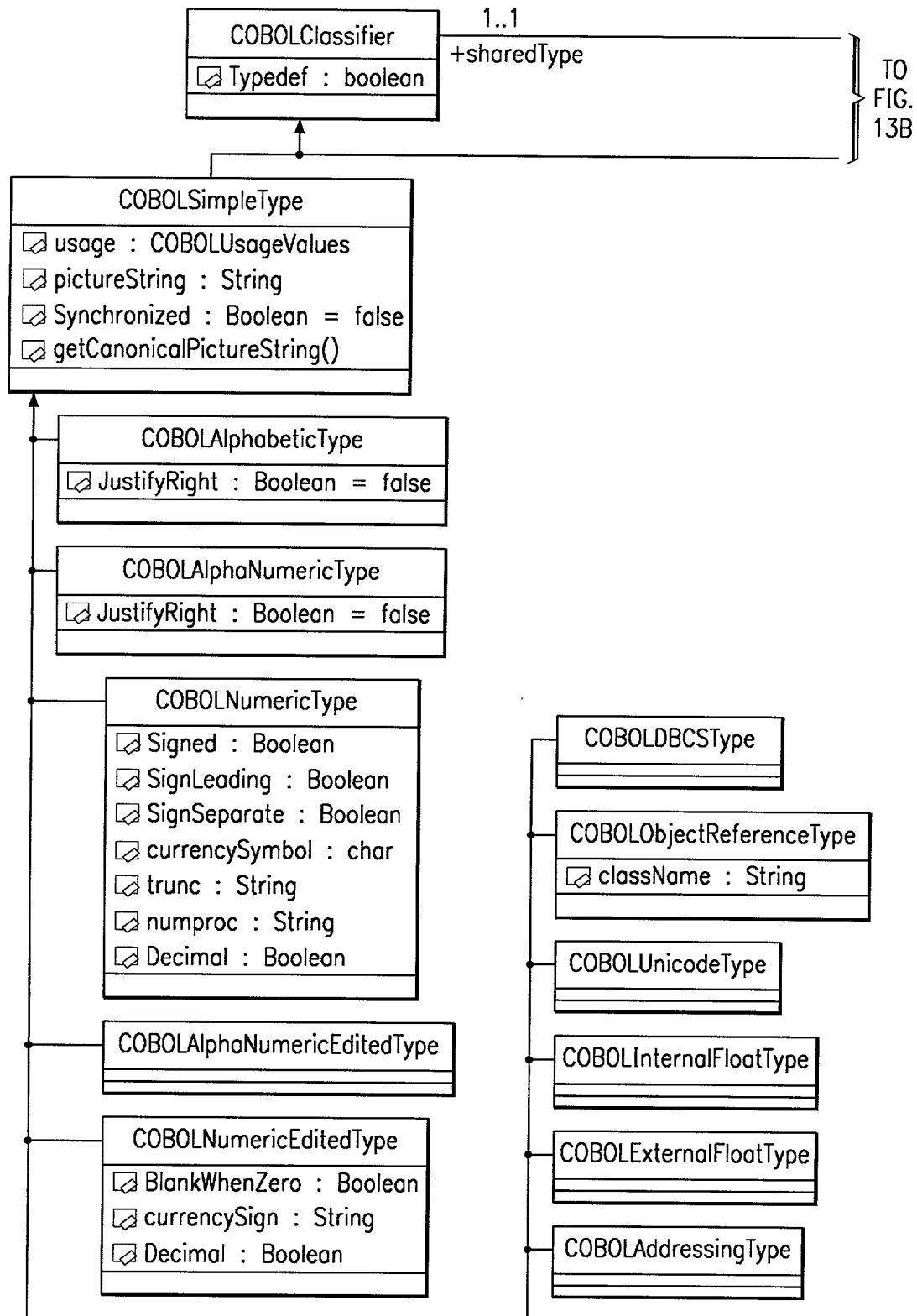
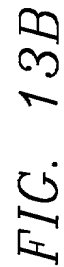


FIG. 13A



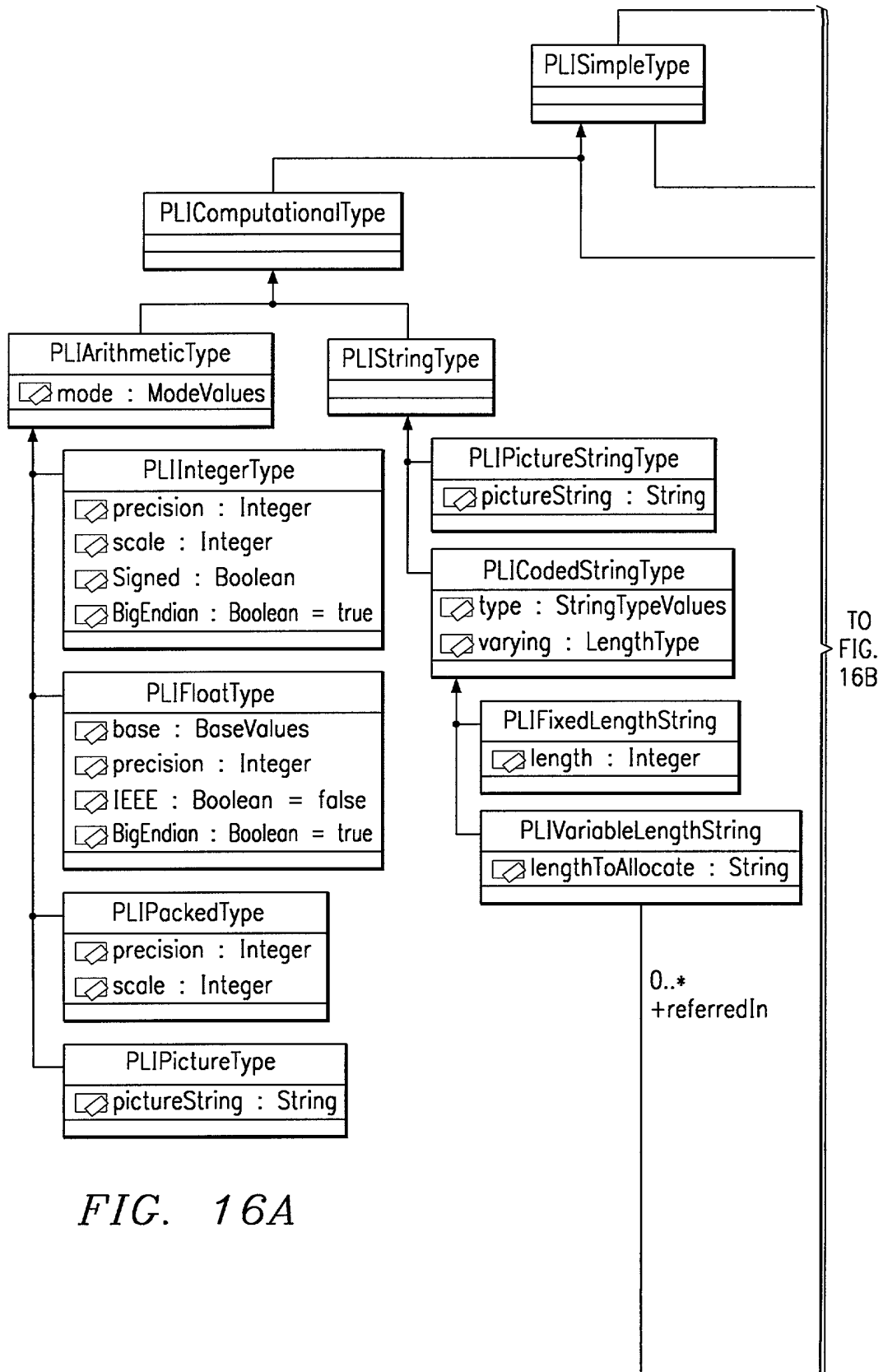
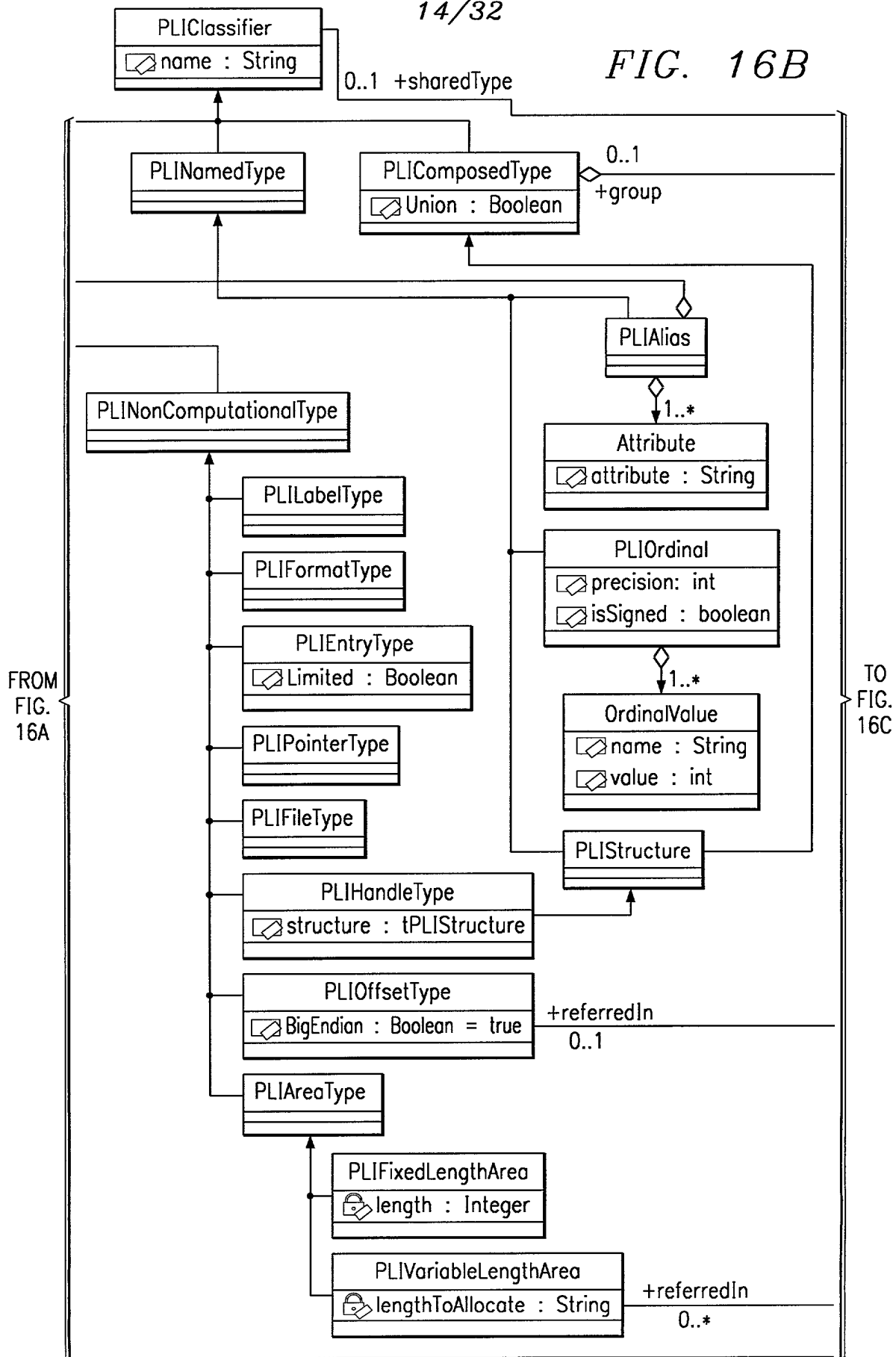


FIG. 16A

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FIG. 16B



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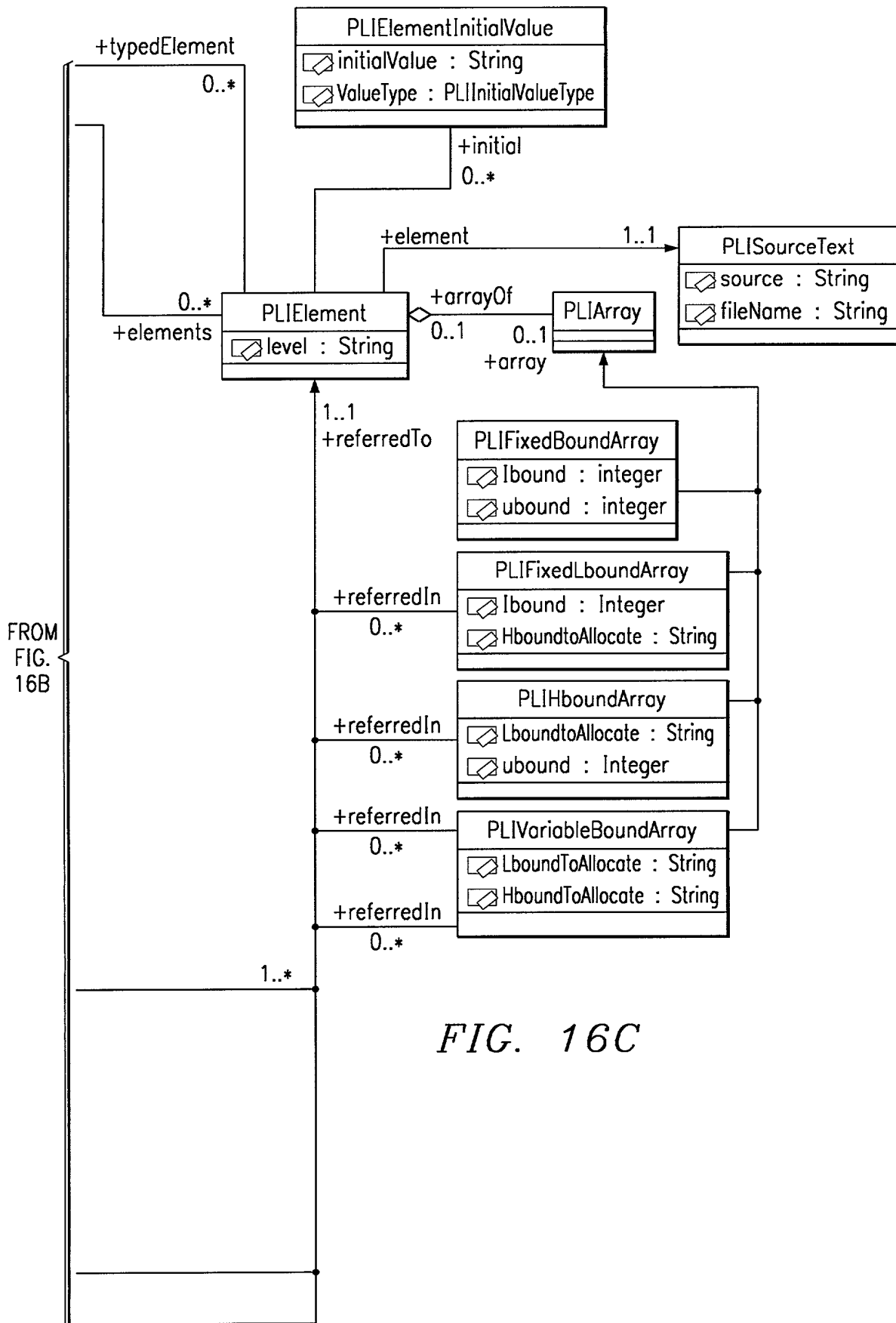


FIG. 16C

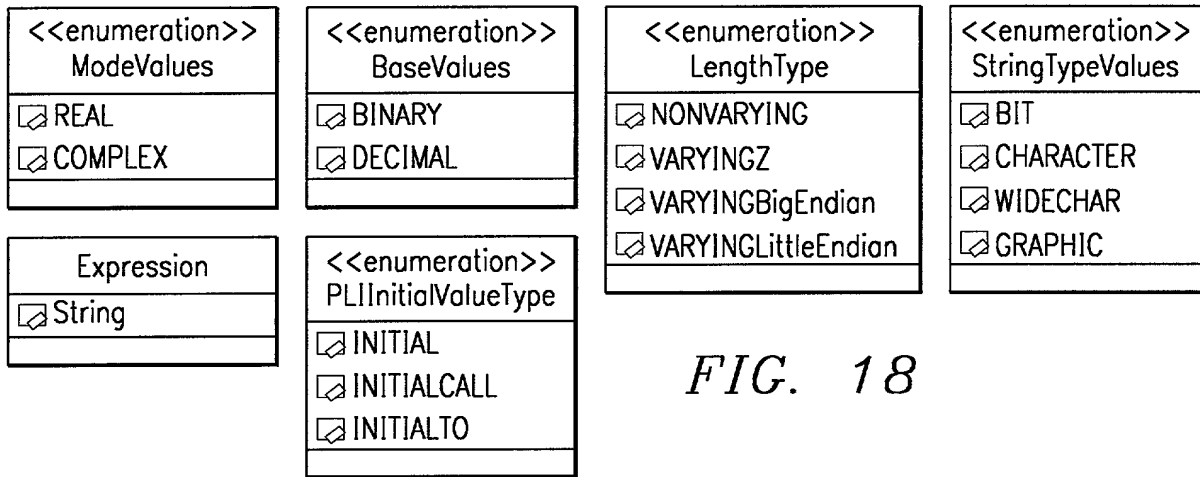


FIG. 18

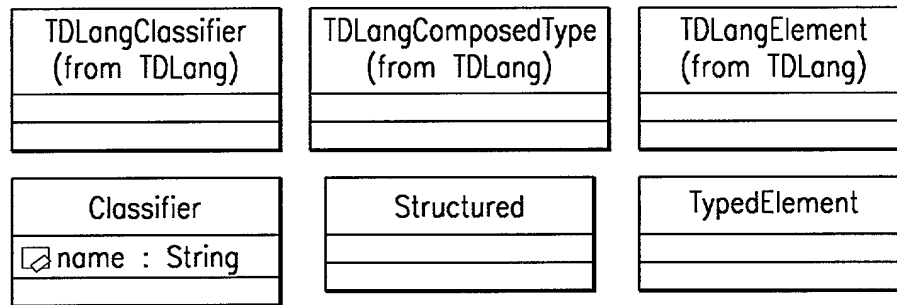


FIG. 19

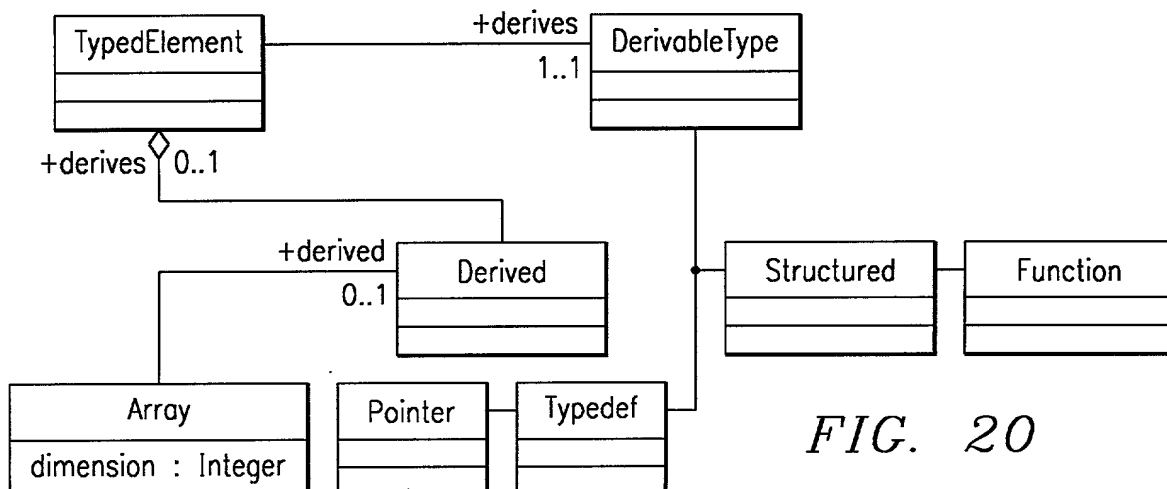


FIG. 20



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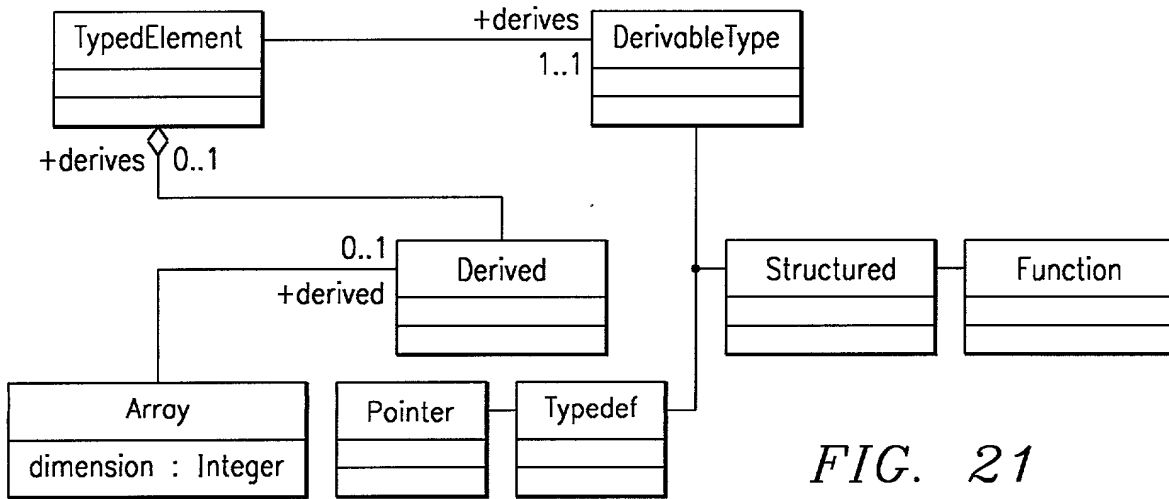


FIG. 21

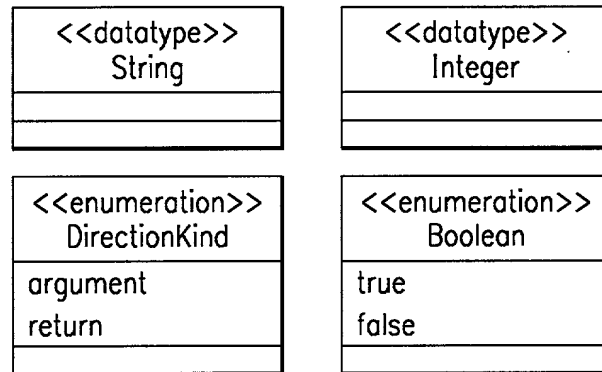


FIG. 23

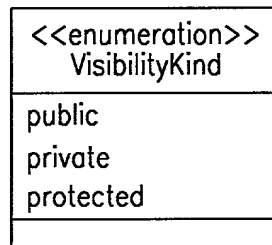


FIG. 25

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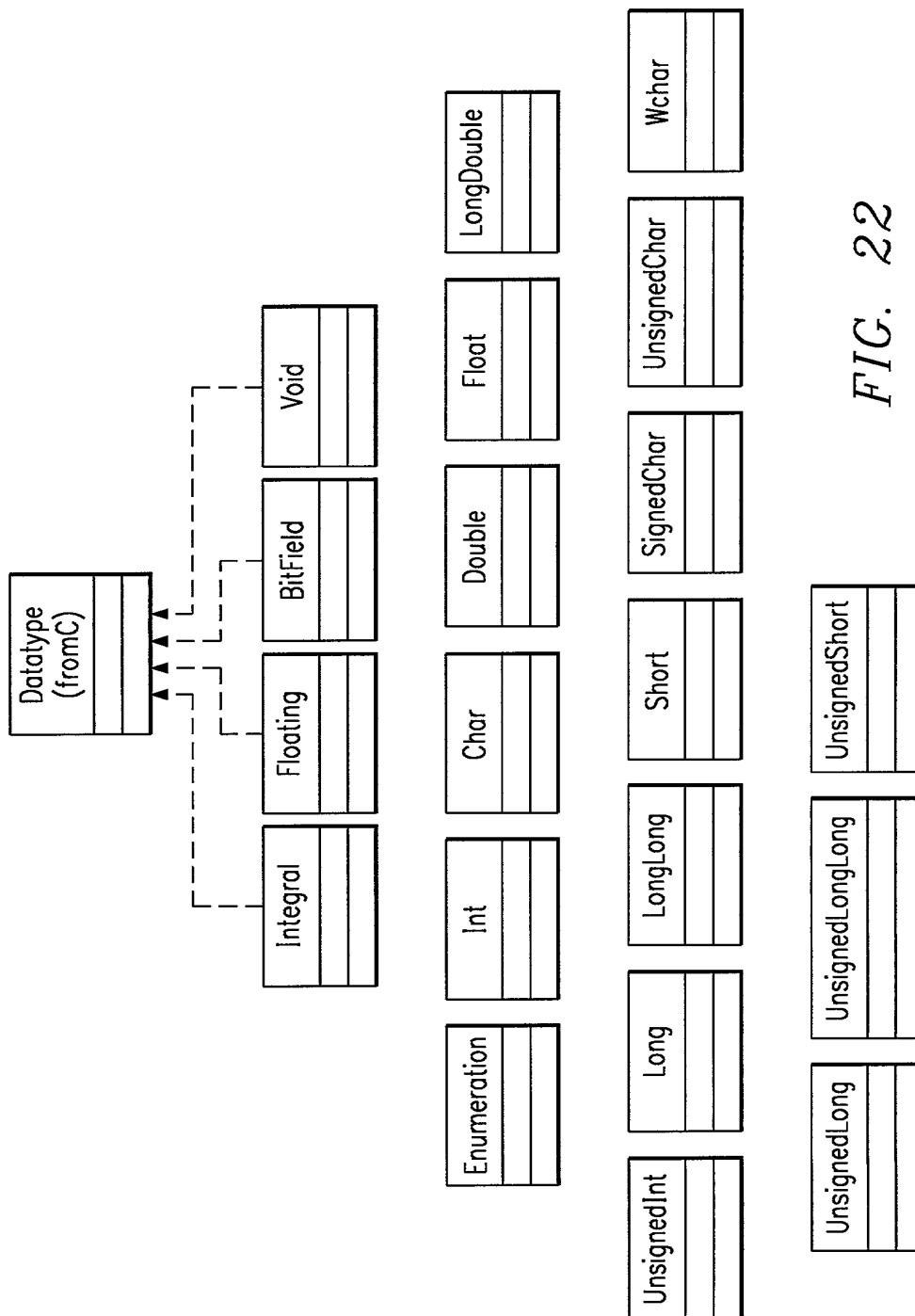


FIG. 22

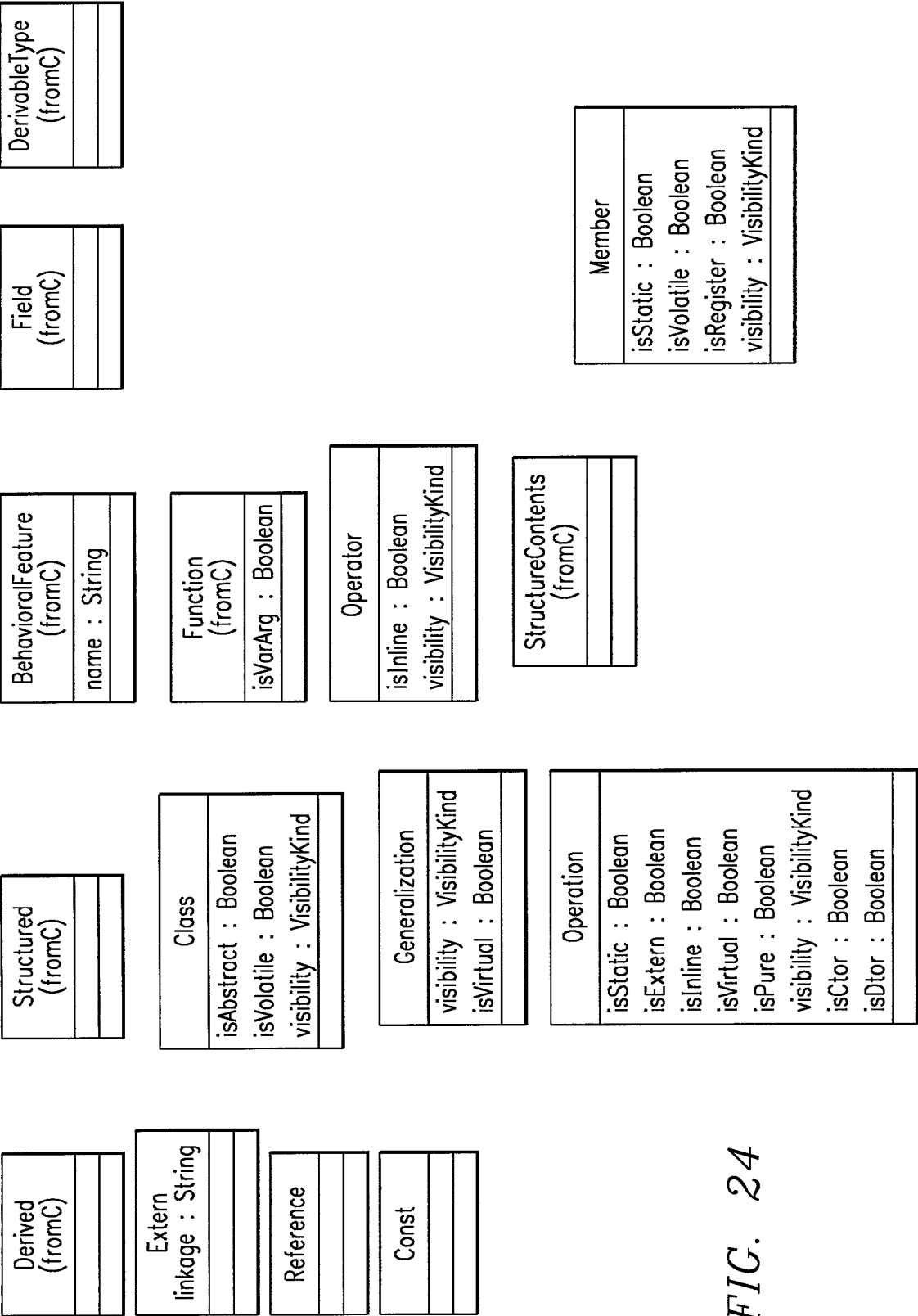


FIG. 24

# FIG. 26

```
classDiagram
    class IMSTransactionMessage {
        <<enumeration>>
        OTMAPPrefixFormats
        OTMAPPrefixFormat : OTMAPPrefixFormats = one
        StandardFieldsFlag : boolean
    }
    class OTMAPPrefixComponent {
        OTMAPPrefix
    }
    class OTMAPPrefixContainer {
        +ControlDataContainer
        +StateDataContainer
        +SecurityDataContainer
        +UserDataContainer
    }
    class ControlDataContainer {
        +ControlDataComponent
    }
    class StateDataContainer {
        +StateDataComponent
    }
    class SecurityDataContainer {
        +SecurityDataComponent
    }
    class UserDataContainer {
        +UserDataComponent
    }
    class ControlData {
        ControlData
    }
    class StateData {
        StateData
    }
    class SecurityData {
        SecurityData
    }
    class UserData {
        UserData
    }
    class StandardFields {
        Length : TwoByteField
        ReservedField : TwoByteField
        TransactionCode : VariableLengthField
    }
    class ApplicationData {
        ApplicationData (from ApplicationData)
    }
    class Field {
        Field
    }
    IMSTransactionMessage "1..1" *-- "0..1" OTMAPPrefixComponent
    IMSTransactionMessage "1..1" *-- "0..1" OTMAPPrefixContainer
    OTMAPPrefixComponent "1..1" *-- "1..1" OTMAPPrefix
    OTMAPPrefixComponent "1..1" *-- "0..1" StateDataContainer
    OTMAPPrefixComponent "1..1" *-- "0..1" SecurityDataContainer
    OTMAPPrefixComponent "1..1" *-- "0..1" UserDataContainer
    OTMAPPrefixContainer "0..1" *-- "1..1" ControlDataContainer
    OTMAPPrefixContainer "0..1" *-- "1..1" StateDataContainer
    OTMAPPrefixContainer "0..1" *-- "1..1" SecurityDataContainer
    OTMAPPrefixContainer "0..1" *-- "1..1" UserDataContainer
    ControlDataContainer "1..1" *-- "1..1" ControlDataComponent
    StateDataContainer "1..1" *-- "1..1" StateDataComponent
    SecurityDataContainer "1..1" *-- "1..1" SecurityDataComponent
    UserDataContainer "1..1" *-- "1..1" UserDataComponent
    ControlDataComponent "1..1" *-- "1..1" ControlData
    StateDataComponent "1..1" *-- "1..1" StateData
    SecurityDataComponent "1..1" *-- "1..1" SecurityData
    UserDataComponent "1..1" *-- "1..1" UserData
    StandardFields "0..1" *-- "1..1" ApplicationData
    StandardFields "0..1" *-- "1..*" Field
```

IMSTransactionMessage

OTMAPPrefixFormat : OTMAPPrefixFormats = one

StandardFieldsFlag : boolean

OTMAPPrefixComponent

OTMAPPrefix

+StateDataContainer

+SecurityDataContainer

+UserDataContainer

+ControlDataContainer

+StateDataComponent

+SecurityDataComponent

+UserDataComponent

ControlData

StateData

SecurityData

UserData

StandardFields

Length : TwoByteField

ReservedField : TwoByteField

TransactionCode : VariableLengthField

ApplicationData (from ApplicationData)

Field

{ControlData appears in all prefixes}

{StateData appears in the prefix preceding the first segment of all messages.}

{SecurityData optionally appears in the prefix preceding the first segment of all messages.}

{UserData optionally appears in the prefix preceding the first segment of all messages.}

{The Transaction Code field can be from 1 to 8 bytes in length. It's included only in input messages.}

In direct XML-to-IMS application scenarios, StandardFields are not included.

Format "one": a prefix appears before all message segments.  
Format "two": a prefix appears only before the first segment.

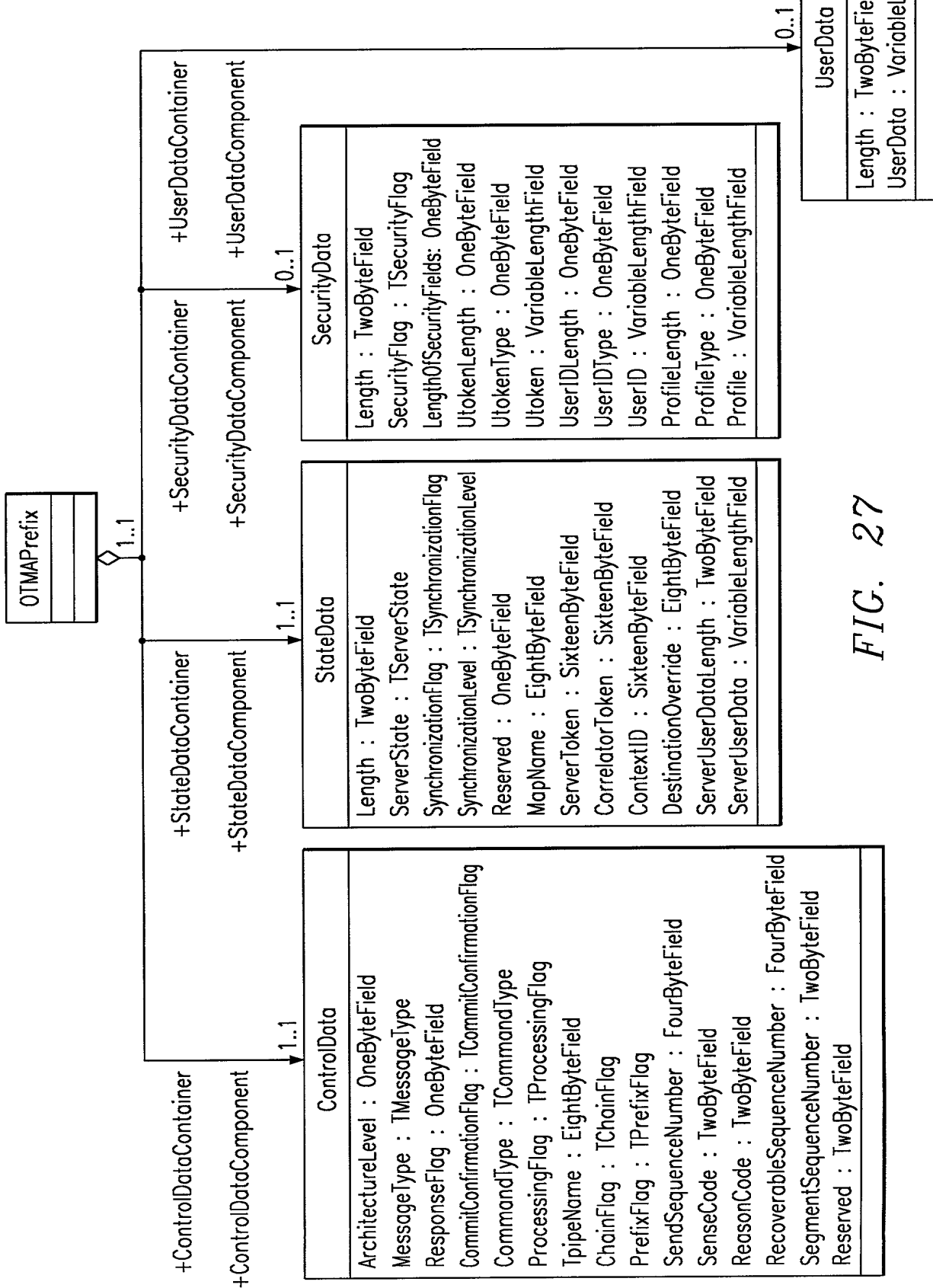


FIG. 27

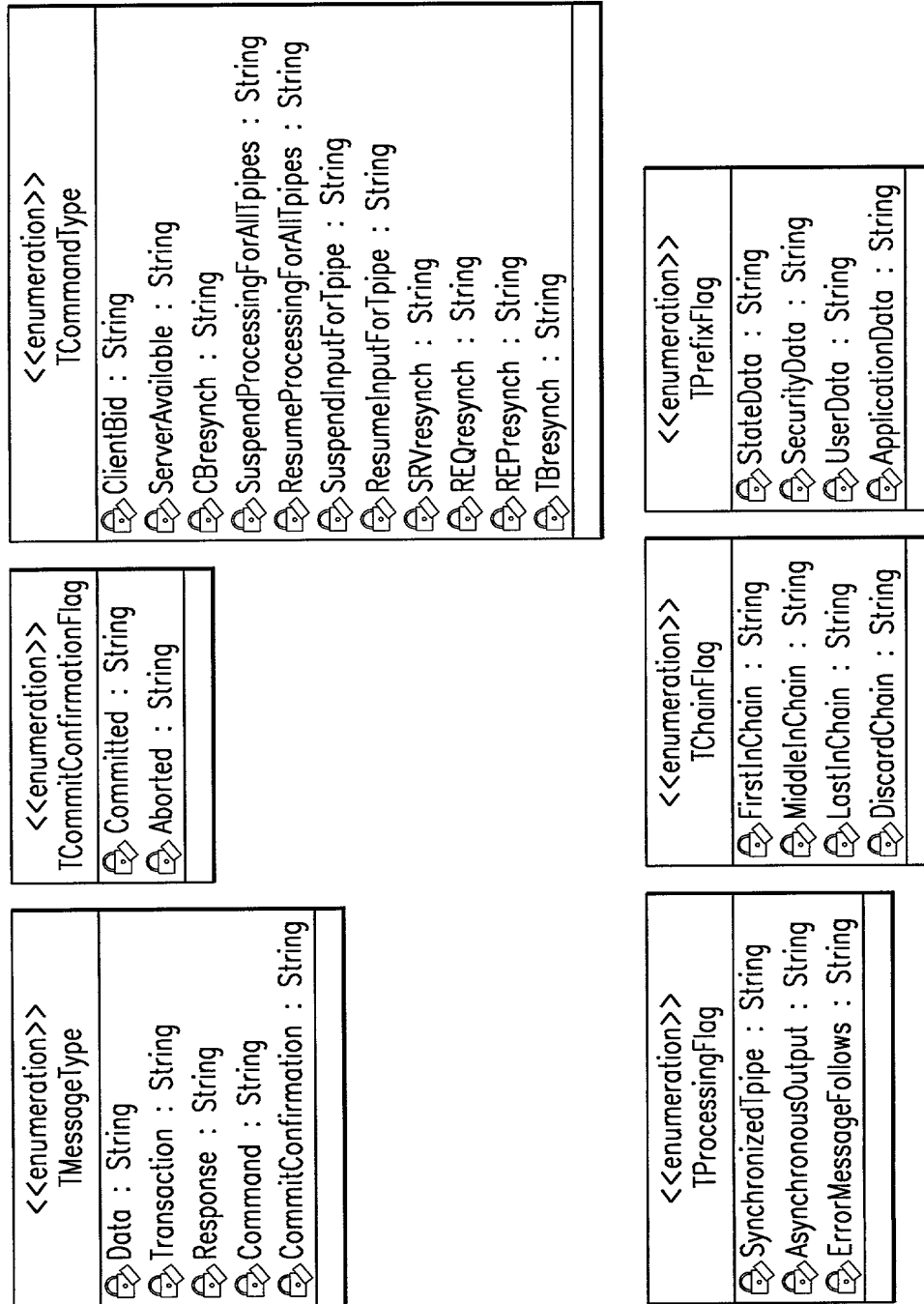


FIG. 28

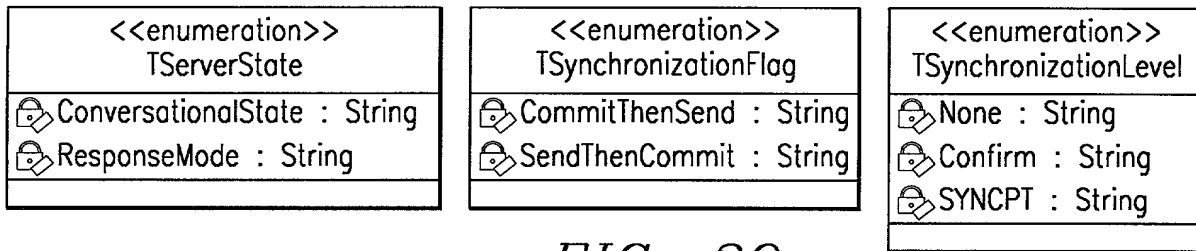


FIG. 29

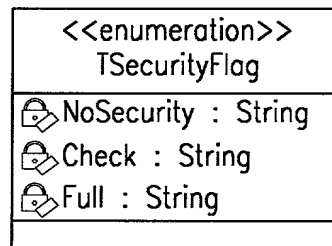


FIG. 30

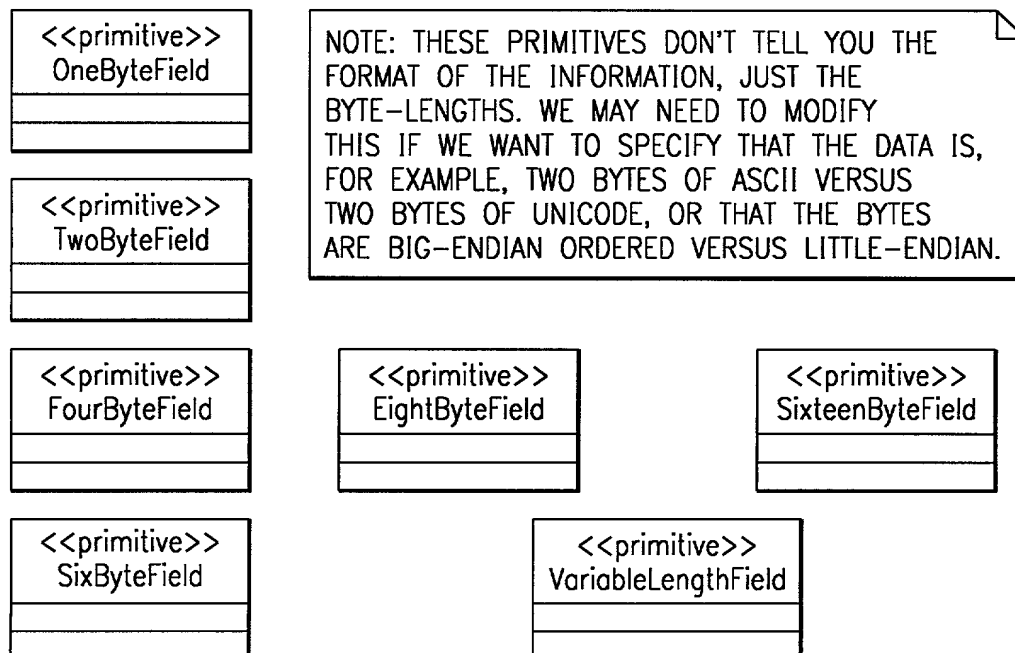


FIG. 31

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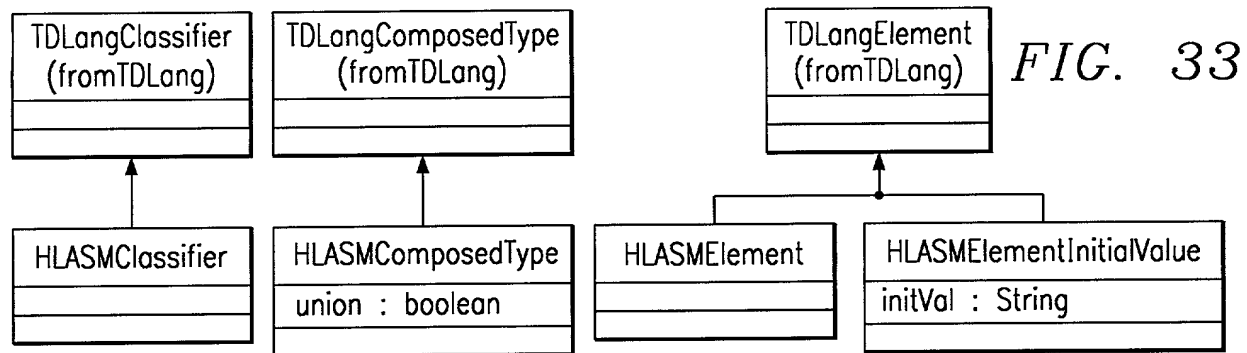
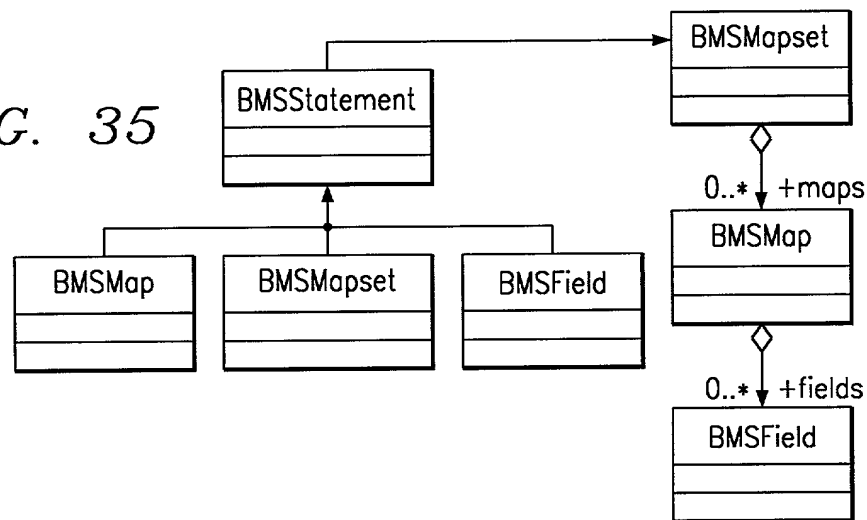
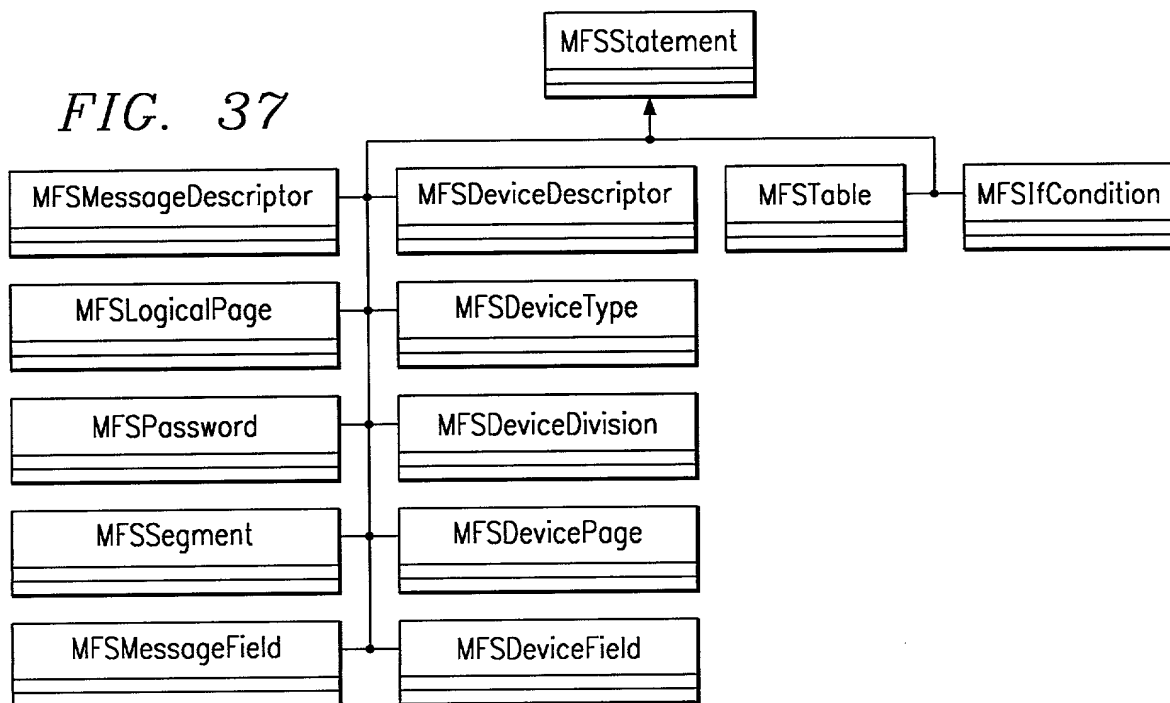
*FIG. 35**FIG. 37*

FIG. 34

<<enumeration>> HLASMAAddressType	<<enumeration>> HLASMCCharacterType	<<enumeration>> HLASMFloatingPointRoundType	<<enumeration>> HLASMFloatingPointType	<<enumeration>> HLASMSizeType
addressValue baseRegisterAndDisplacementValue cumulativeExternalIDummy externalDummySectionOffset externalSymbolAddress lengthOfClassOrCumulativeExternalDummy psectAddress	ASCII DBCS EBCDIC mixedDBCS unicode	addOneInFirstLostBitPosition roundDown roundUp roundToZero unbiasedNearest	binary hexadecimal	bit byte halfword fullword doubleword quad twodoublewords

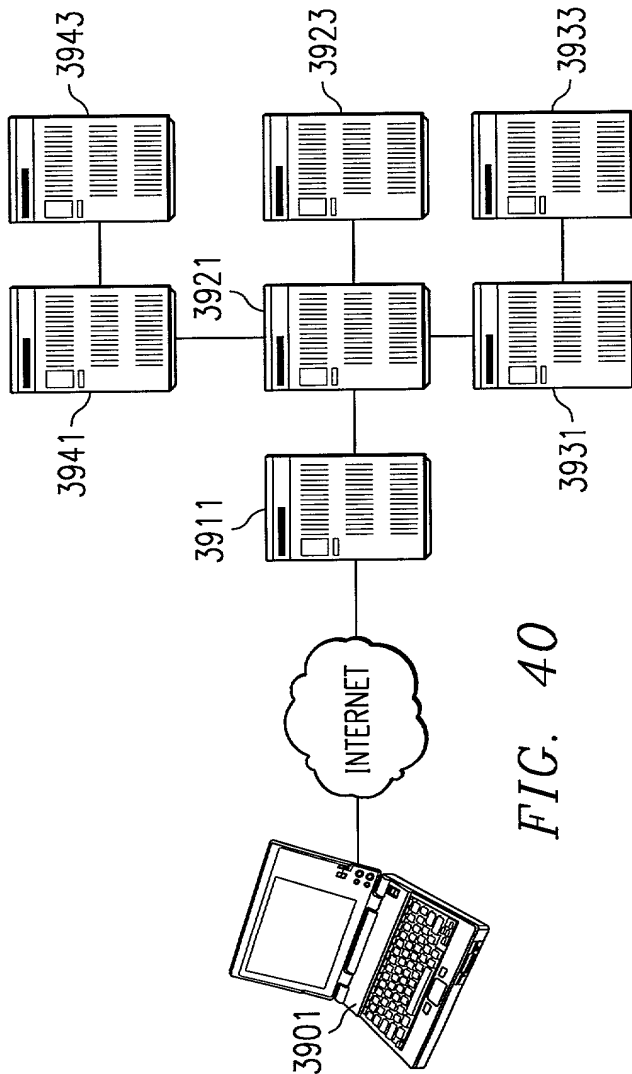


FIG. 40

BMSMapset	BMSMap	BMSField
base : String color : BMSColorType control : BMSControlType cursorLocation : boolean data : BMSDataType descriptionAttributes : BMSMapAttributesType extendedAttributes : BMSExtendedAttributesType fieldSeparator : String fold BMSFoldType highlighting : BMSHighlightingType horizontalTabs : int language : BMSLanguageType logicalDeviceCode : int mapAttributes : BMSMapAttributesType mode : BMSModeType outboardFormatting : boolean outlining : BMSOutliningType partition : String programmedSymbol : String shiftOutShiftIn : boolean storage : boolean suffix : String terminal : String tiaoPrefix : boolean transparent : boolean trigraph : boolean type : BMSMapsetType validation : BMSValidationType verticalTabs : int	column : String color : BMSColorType control : BMSControlType cursorLocation : boolean data : BMSDataType descriptionAttributes : BMSMapAttributesType extendedAttributes : BMSExtendedAttributesType fields : boolean fieldSeparator : String header : boolean highlighting : BMSHighlightingType justify : BMSJustifyType line : String mapAttributes : BMSMapAttributesType outboardFormatting : boolean outlining : BMSOutliningType partition : String programmedSymbol : String shiftOutShiftIn : boolean size : BMSSizeType terminal : String tiaoPrefix : boolean trailer : boolean transparent : boolean validation : BMSValidationType	attributes : BMSAttributesType case : boolean color : BMSColorType group : String highlighting : BMSHighlightingType initialValue : String justify : BMSJustifyType length : int occurs : int outlining : BMSOutliningType pictureInput : String pictureOutput : String position : BMSPositionType programmedSymbol : String shiftOutShiftIn : String transparent : boolean validation : BMSValidationType

FIG. 36A

FIG. 36B

BMSAttributesType	skip : boolean bright : boolean detectable : boolean dark : boolean modified : boolean cursor : boolean normal : boolean numeric : boolean protected : boolean
<<enumeration>> BMSColorType	default blue red green pink turquoise yellow neutral
BMSMapAttributesType	color : boolean highlighting : boolean outline : boolean programmedSymbol : boolean sosi : boolean transparent : boolean validation : boolean
<<enumeration> BMSMapsetType	dsect map final

<<enumeration>> BMSDataType	field block
<<enumeration>> BMSExtendedAttributesType	no yes maponly
<<enumeration>> BMSControlType	print length freekb alarm frset
<<enumeration>> BMSModeType	out in inout
<<enumeration>> BMSHighlightingType	off blink reverse underline
BMSOutliningType	box : boolean left : boolean right : boolean over : boolean under : boolean
BMSJustifyType	left : boolean right : boolean first : boolean last : boolean bottom : boolean
BMSPositionType	line : int column : int number : int
BMSSizeType	line : int column : int
BMSStatement	label : String comments : String
<<enumeration>> BMSFoldType	lower upper
<<enumeration>> BMSLanguageType	assembler c cobol cobol2 pli
<<enumeration>> BMSValidationType	mustFill mustEnter trigger userExit

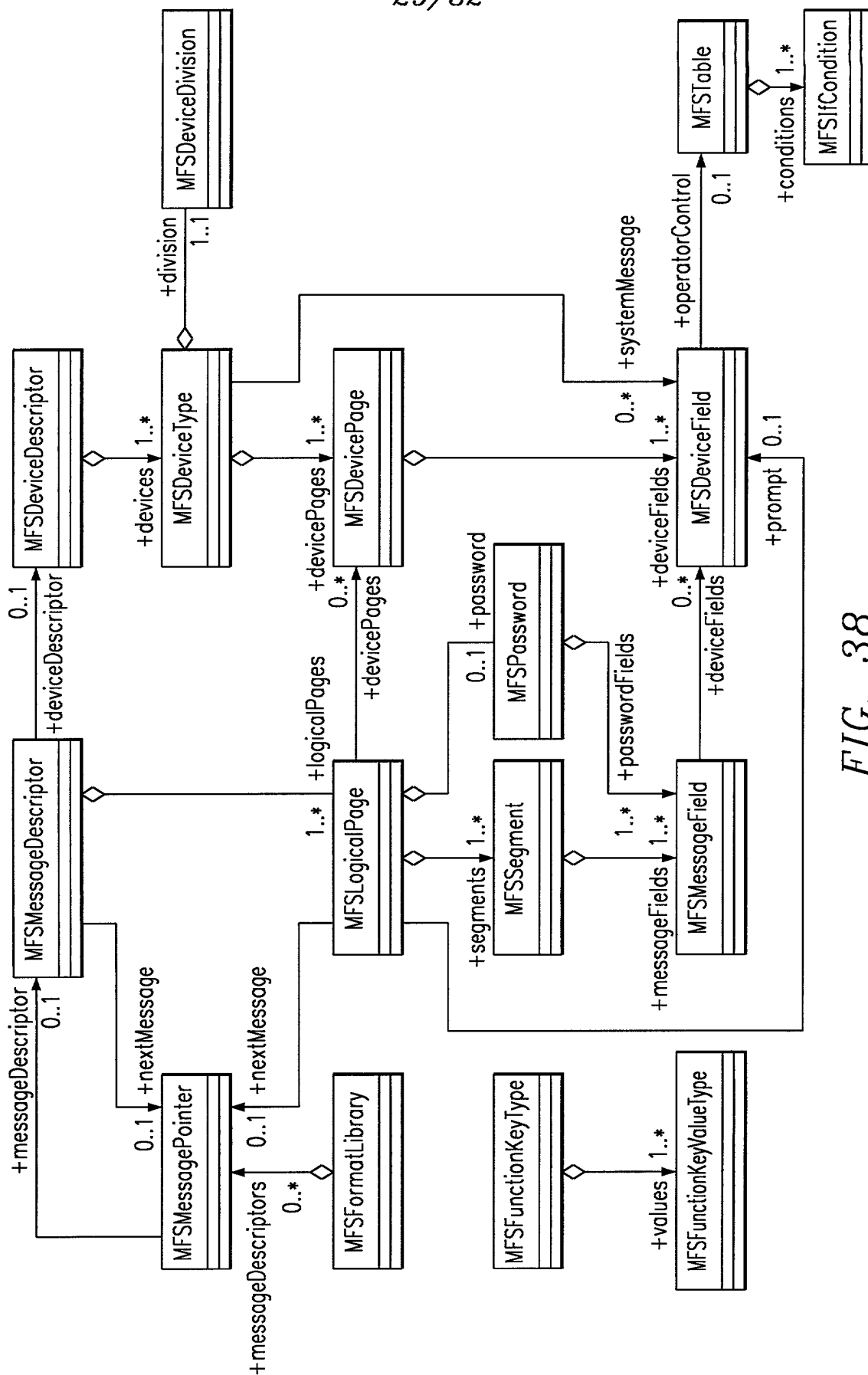


FIG. 38

FIG. 39A

FIG. 39A

<table><tr><td>MFSFeatureType</td></tr><tr><td>card : boolean</td></tr><tr><td>dataEntryKeyboard : boolean</td></tr><tr><td>functionKeys : boolean</td></tr><tr><td>group : int</td></tr><tr><td>ignore : boolean</td></tr><tr><td>pen : boolean</td></tr></table>	MFSFeatureType	card : boolean	dataEntryKeyboard : boolean	functionKeys : boolean	group : int	ignore : boolean	pen : boolean	<table><tr><td>MFSFunctionKeyType</td></tr><tr><td>fieldName : String</td></tr></table>	MFSFunctionKeyType	fieldName : String	<table><tr><td>MFSOutliningType</td></tr><tr><td>box : boolean</td></tr><tr><td>right : boolean</td></tr><tr><td>left : boolean</td></tr><tr><td>under : boolean</td></tr><tr><td>over : boolean</td></tr><tr><td>value : String</td></tr></table>	MFSOutliningType	box : boolean	right : boolean	left : boolean	under : boolean	over : boolean	value : String	<table><tr><td>MFSLengthType</td></tr><tr><td>length : int</td></tr><tr><td>firstByte : int</td></tr></table>	MFSLengthType	length : int	firstByte : int	<table><tr><td>MFSPositionType</td></tr><tr><td>row : int</td></tr><tr><td>column : int</td></tr><tr><td>physicalPage : int</td></tr></table>	MFSPositionType	row : int	column : int	physicalPage : int								
MFSFeatureType																																			
card : boolean																																			
dataEntryKeyboard : boolean																																			
functionKeys : boolean																																			
group : int																																			
ignore : boolean																																			
pen : boolean																																			
MFSFunctionKeyType																																			
fieldName : String																																			
MFSOutliningType																																			
box : boolean																																			
right : boolean																																			
left : boolean																																			
under : boolean																																			
over : boolean																																			
value : String																																			
MFSLengthType																																			
length : int																																			
firstByte : int																																			
MFSPositionType																																			
row : int																																			
column : int																																			
physicalPage : int																																			
<table><tr><td>&lt;&lt;enumeration&gt;&gt; MFSColorType</td></tr><tr><td>blue</td></tr><tr><td>red</td></tr><tr><td>green</td></tr><tr><td>pink</td></tr><tr><td>turquoise</td></tr><tr><td>yellow</td></tr><tr><td>default</td></tr><tr><td>neutral</td></tr></table>	<<enumeration>> MFSColorType	blue	red	green	pink	turquoise	yellow	default	neutral	<table><tr><td>&lt;&lt;enumeration&gt;&gt; MFSCompressionType</td></tr><tr><td>fixed</td></tr><tr><td>short</td></tr><tr><td>all</td></tr></table>	<<enumeration>> MFSCompressionType	fixed	short	all	<table><tr><td>&lt;&lt;enumeration&gt;&gt; MFSDescriptorType</td></tr><tr><td>input</td></tr><tr><td>output</td></tr><tr><td>inout</td></tr></table>	<<enumeration>> MFSDescriptorType	input	output	inout	<table><tr><td>&lt;&lt;enumeration&gt;&gt; MFSDetectabilityType</td></tr><tr><td>deferred</td></tr><tr><td>immediate</td></tr><tr><td>nondetectable</td></tr></table>	<<enumeration>> MFSDetectabilityType	deferred	immediate	nondetectable	<table><tr><td>&lt;&lt;enumeration&gt;&gt; MFSHighlightingType</td></tr><tr><td>default</td></tr><tr><td>blink</td></tr><tr><td>reversevideo</td></tr><tr><td>underline</td></tr></table>	<<enumeration>> MFSHighlightingType	default	blink	reversevideo	underline	<table><tr><td>&lt;&lt;enumeration&gt;&gt; MFSIntensityType</td></tr><tr><td>normal</td></tr><tr><td>high</td></tr><tr><td>nondisplayable</td></tr></table>	<<enumeration>> MFSIntensityType	normal	high	nondisplayable
<<enumeration>> MFSColorType																																			
blue																																			
red																																			
green																																			
pink																																			
turquoise																																			
yellow																																			
default																																			
neutral																																			
<<enumeration>> MFSCompressionType																																			
fixed																																			
short																																			
all																																			
<<enumeration>> MFSDescriptorType																																			
input																																			
output																																			
inout																																			
<<enumeration>> MFSDetectabilityType																																			
deferred																																			
immediate																																			
nondetectable																																			
<<enumeration>> MFSHighlightingType																																			
default																																			
blink																																			
reversevideo																																			
underline																																			
<<enumeration>> MFSIntensityType																																			
normal																																			
high																																			
nondisplayable																																			
<table><tr><td>&lt;&lt;enumeration&gt;&gt; MFSJustifyType</td></tr><tr><td>left</td></tr><tr><td>right</td></tr></table>	<<enumeration>> MFSJustifyType	left	right	<table><tr><td>&lt;&lt;enumeration&gt;&gt; MFSOperatorType</td></tr><tr><td>equal</td></tr><tr><td>notEqual</td></tr><tr><td>greaterThan</td></tr><tr><td>greaterThanOrEqual</td></tr><tr><td>lessThan</td></tr><tr><td>lessThanOrEqual</td></tr></table>	<<enumeration>> MFSOperatorType	equal	notEqual	greaterThan	greaterThanOrEqual	lessThan	lessThanOrEqual	<table><tr><td>&lt;&lt;enumeration&gt;&gt; MFSPageFormattingType</td></tr><tr><td>defined</td></tr><tr><td>space</td></tr><tr><td>float</td></tr></table>	<<enumeration>> MFSPageFormattingType	defined	space	float	<table><tr><td>&lt;&lt;enumeration&gt;&gt; MFSValidationType</td></tr><tr><td>default</td></tr><tr><td>fill</td></tr><tr><td>field</td></tr><tr><td>both</td></tr></table>	<<enumeration>> MFSValidationType	default	fill	field	both	<table><tr><td>MFSPageType</td></tr><tr><td>number : int</td></tr><tr><td>formatting : MFSPageFormattingType</td></tr></table>	MFSPageType	number : int	formatting : MFSPageFormattingType									
<<enumeration>> MFSJustifyType																																			
left																																			
right																																			
<<enumeration>> MFSOperatorType																																			
equal																																			
notEqual																																			
greaterThan																																			
greaterThanOrEqual																																			
lessThan																																			
lessThanOrEqual																																			
<<enumeration>> MFSPageFormattingType																																			
defined																																			
space																																			
float																																			
<<enumeration>> MFSValidationType																																			
default																																			
fill																																			
field																																			
both																																			
MFSPageType																																			
number : int																																			
formatting : MFSPageFormattingType																																			

FIG. 39B

FIG. 39B

